

Work Order ID 71854

Page 1

Wednesday, July 13, 2011 11:00:09 AM

Item ID: D3183-5

Accept



Setup Start



Revision ID:

Item Name: Bearing

SO

Stop



Start Date: 7/14/2011

Start Qty: 20.00



Cust Item ID:

Required Date: 7/28/2011

Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan: MFDate: 11-07-03

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3183	Rev C1

100



PURCHASING

Purchasing

Memo

Purchasing

Issue P/O: 14481 Bearing as per Dwg D3183 Single row, deep groove, Conrad type, shielded Possible Supplier: NSK P/N 6800ZZ Certificate of conformity note is required

CD 110714

SO

110



Receive & Inspect for Damage & Mat'l Certs

Packaging

Memo

Packaging

Ensure certificate of conformity is attached

120



QC6- Inspect dimensions to drawing

QC

Quality Control

Memo

0.00

0.00

SO

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Wednesday, July 13, 2011 11:00:09 AM



Page 2

Item ID: D3183-5

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Cust Item ID:

Required Date: 7/28/2011 Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

130

Operation
DescriptionIdentify as per dwg & Stock Location: 230BSet Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Packaging

Memo

0.00

7/17/18 (50)

140



QC21- Final Inspection - Work Order Release

0.00

QC

Quality Control

Memo

0.00

7/17/18 (50)7/17/18 (50)

W/O:

WORK ORDER CHANGES

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NOTE: Date & initial all entries

Picklist Print

Page 1

Wednesday, July 13, 2011 11:00:05 AM

Work Order ID: 71854



Parent Item: D3183-5



Parent Item Name: Bearing

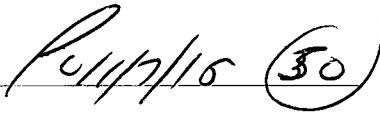
Start Date: 7/14/2011

Required Date: 7/28/2011

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP: A□03.03.27□New issue□KJ/RF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
6800ZZ  Bearing		Purchased	No			100	Each	0.0000	1	20			(30)

W/O:

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. C
		D3183	SHEET 1 OF 4
DATE	04.02.17	TITLE	SCALE 1:1

RELEASED
04.03.01

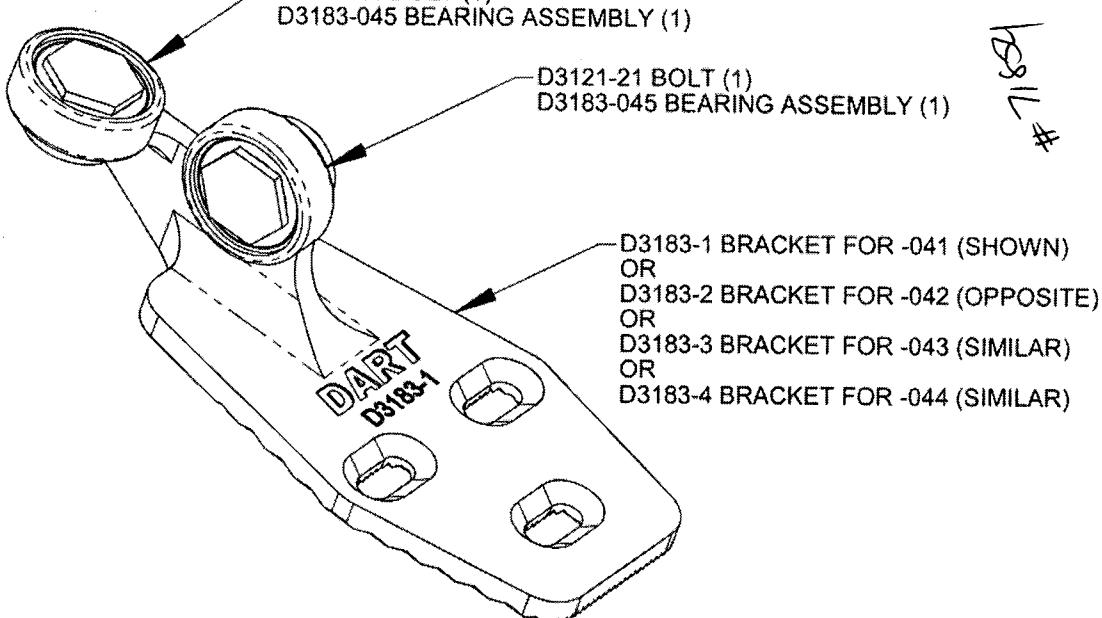
DEO ATTACHED

C 1 ~~04.11.09~~ 04.11.09 0.830 WAS 0.850

A 03.01.24 NEW ISSUE

B 03.06.17 REMOVE BEARING; 1.012 WS 0.882

C 04.02.17 ADD -045-9; 0.182 WAS 0.431

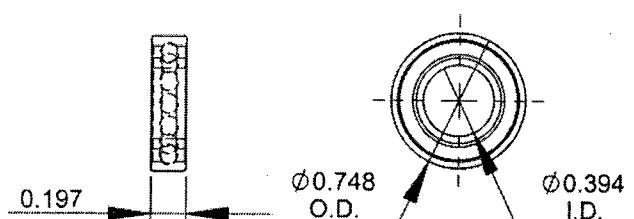


D3183-041 BRACKET ASSEMBLY (SHOWN)

D3183-042 BRACKET ASSEMBLY (OPPOSITE)

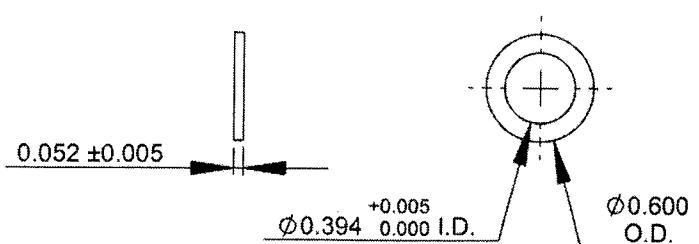
D3183-043 BRACKET ASSEMBLY (SIMILAR)

D3183-044 BRACKET ASSEMBLY (SIMILAR)



D3183-5 BEARING: SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R)
ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

W/O:

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

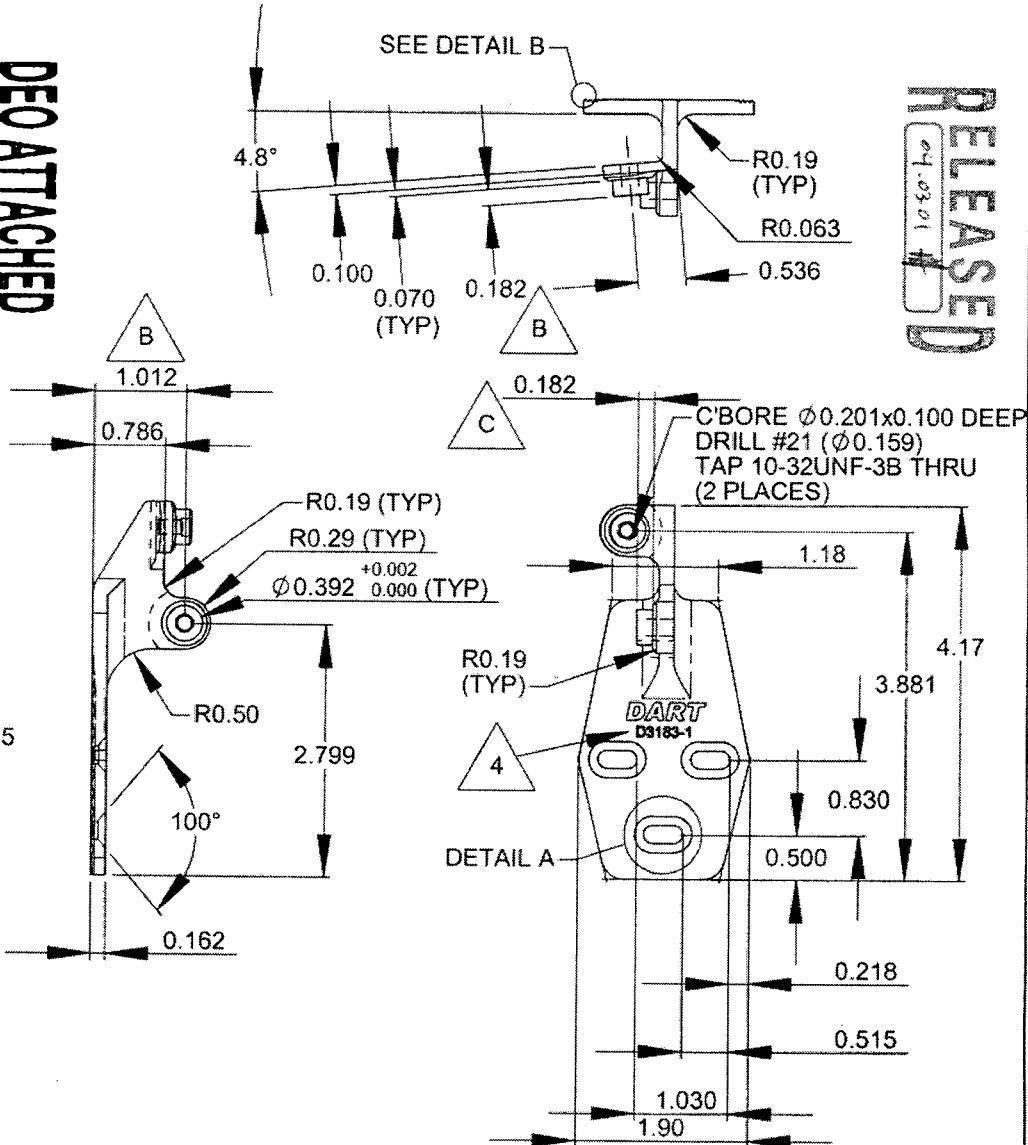
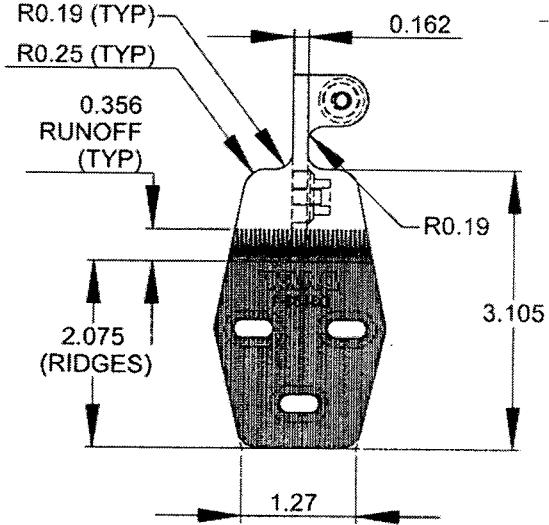
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DEO ATTACHED



D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES



DESIGN	DRAWN BY	DART AEROSPACE LTD	
CHECKED	APPROVED	DRAWING NO.	HAWKESBURY, ONTARIO, CANADA
		D3183	REV. C
DATE	04.02.17	TITLE	BRACKET ASSEMBLY
		SHEET 2 OF 4	
		SCALE	1:2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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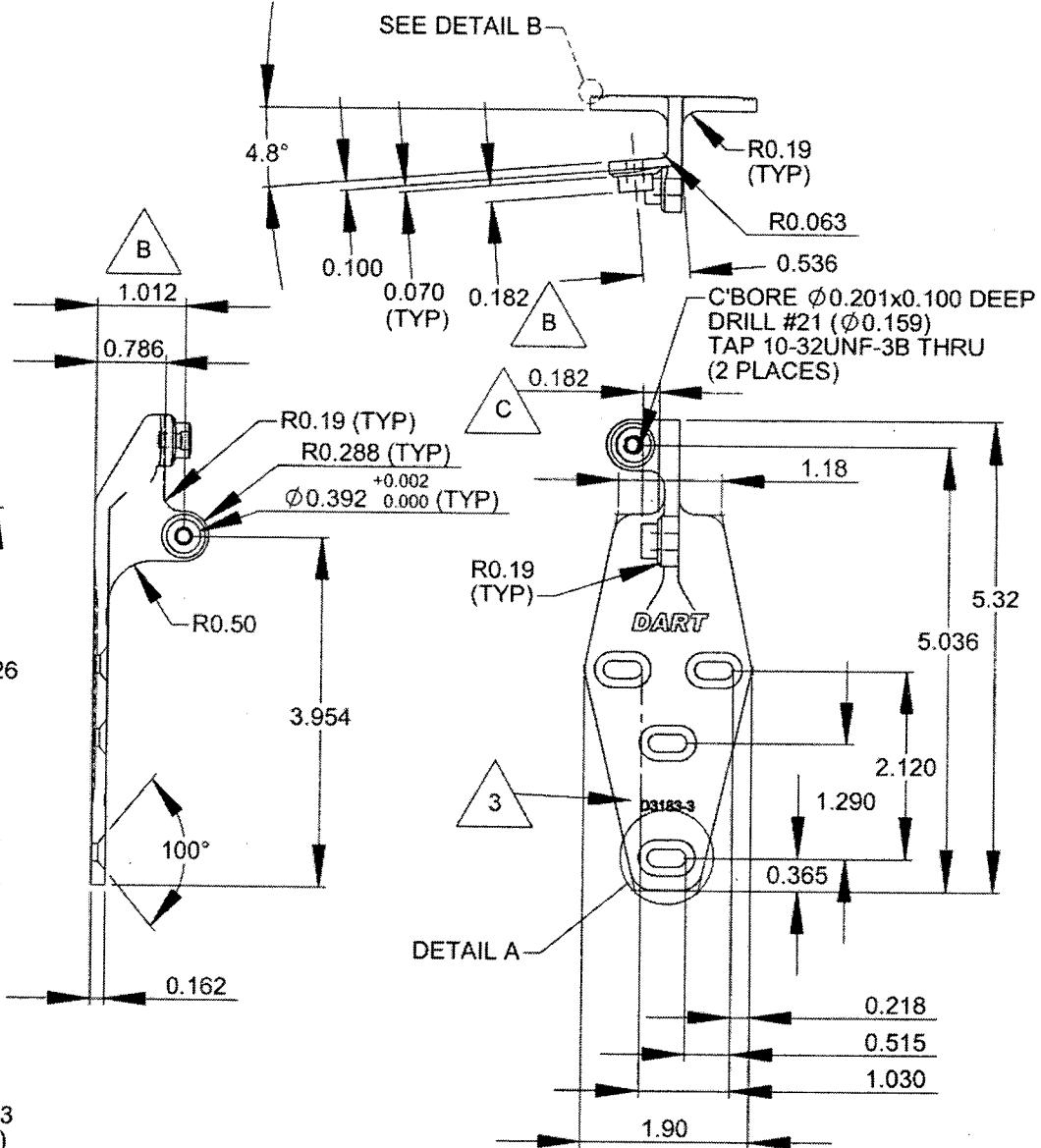
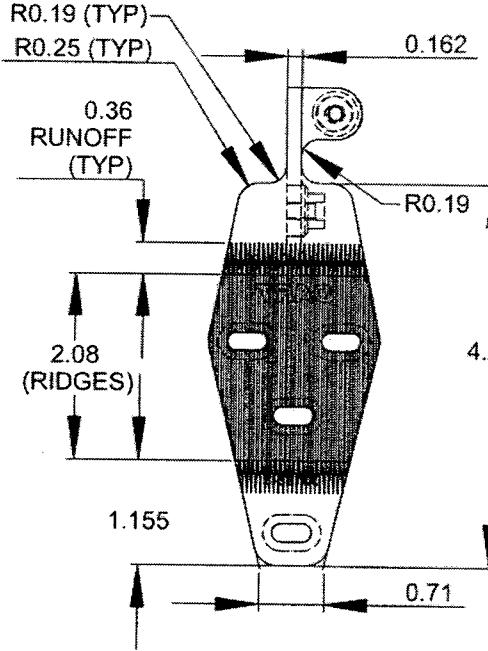
NOTE: Date & initial all entries



DA COPY 155
DART

DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
		DRAWING NO.
		D3183
DATE	04.02.17	TITLE
		BRACKET ASSEMBLY
		REV. C
		SHET 3 OF 4
		SCALE
		1:2

DE ATTACHED
RELEASED
44-02-01



D3183-3 BRACKET SHOWN
(REPLACES BELL P/N 412-030-304-105)
D3183-4 BRACKET OPPOSITE
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

#71854

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

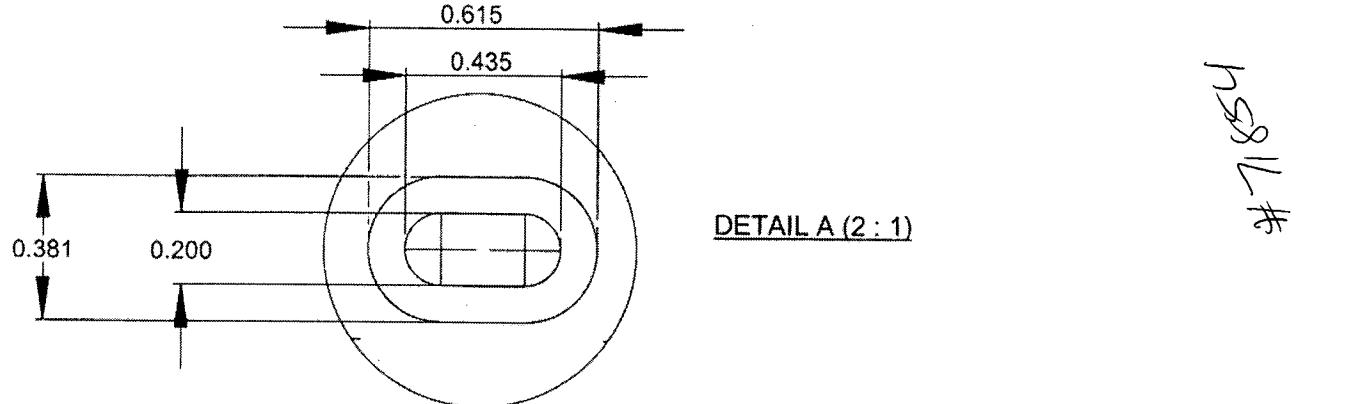
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



COPIED
01/01/2017

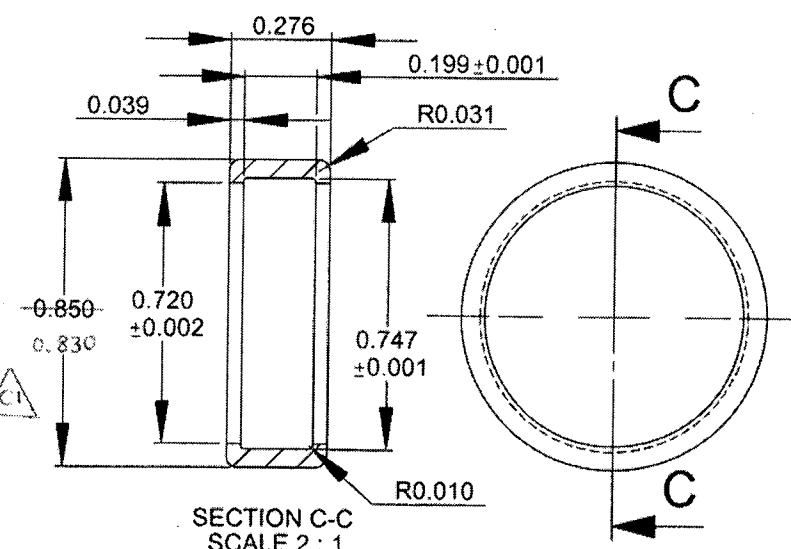
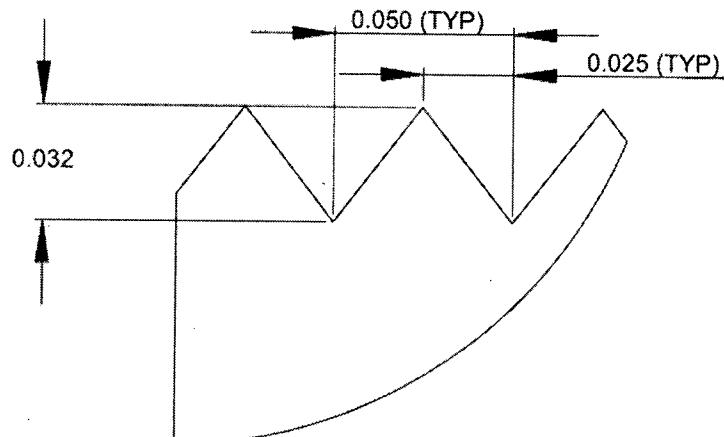
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. C
		D3183	SHEET 4 OF 4
DATE	04.02.17	TITLE	SCALE
		BRACKET ASSEMBLY	1:1



RELEASED
04.03.01

DET ATTACHED

DETAIL B (20 : 1)



D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

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NOTE: Date & initial all entries

DRAWING NO. D3183	TITLE BRACKET ASSEMBLY	REV.C1	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO. D3183-C1-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>q</i>	CHECKED <i>h</i>	MFG. APPR. <i>M</i>	APPROVED <i>MP</i>	DE APPR. <i>MP</i>		
DATE 10.05.14	DATE 10.06.30	DATE 10.06.30	DATE 10.06.30	DATE 10.06.30	DATE 10.06.30	

D3183-5 BEARING

ADD POSSIBLE SUPPLIER: KML P/N 6800-ZZ

BASIC LOAD RATING REQUIREMENT: Cr = 1720 N (386 lb) MIN [DYNAMIC]
Cor = 840 N (188 lb) MIN [STATIC]

REF PAR 10-012

RELEASED
2010-07-22
MP

#71854

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART
aerospace

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER**Purchase Order ID** PO14481**Purchase Order Date** 7/14/2011
PO Print Date 7/14/2011**Page Number** 1 of 1**Order From :** VC-MAI001

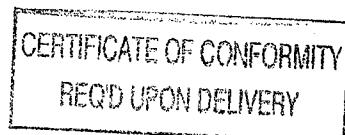
MAIN INDUSTRIAL SALES LTD.
1475, TESSIER
HAWKESBURY, ON K6A 3S6
CA

Contact Name	Buyer	Chantal Lavoie
Vendor Phone	Requisition Nbr	
Vendor Fax	Tax Resale Nbr	10127-2607
Vendor Account Nbr	Terms	Net 30
	Currency	CAD
	FOB	Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA**PAID**
CLL/07/11

Line Nbr	Reference Revision ID	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	6800ZZ	Bearing	7/18/2011 Yes	50.00 Each	Yours ppd	\$1.4800	\$74.00

Special Inst: AS PER DWG D3183 REV. C
B71854
SINGLE ROW, DEEP GROOVE, CONRAD
TYPE
SHIELDED P/N: NSK 6800 ZZ

PO Total: \$74.00**Change Nbr:** 1**Change Date:** 7/14/2011

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

MAIN INDUSTRIAL SALES LTD.

1475 TESSIER ST.
HAWKESBURY ON K6A 3S6
Phone: (613) 632-3595 Ext. Fax: (613) 632-0262
sales@mainindustrialsales.com

Packing Slip

DATE July 14, 2011
NUMBER 0000146311
CUSTOMER NO. DART

BILL TO:

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY ON K6A 1K7

SHIP TO:

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY ON K6A 1K7

(613) 632-5200 Ext.

(613) 632-5200 Ext.

P.O. NUMBER	SALESPERSON	ORDER DATE	REQ. DATE	ORDER NUMBER
14481	EB	14-Jul-11		0000146311
F.O.B.	SHIP VIA	TERMS		
F.O.B. value	PICK UP	NET 30 DAYS		
PART NUMBER		UOM	QUANTITY	
DESCRIPTION			REQ.	SHIPPED B.O.
0-68002ZKML BALL BEARING		EA	50	50
YOUR PART #: 6800ZZ	<i>S. Weller</i>			